

CITIGROUP INC  
Form 424B2  
January 03, 2019

The information in this preliminary pricing supplement is not complete and may be changed. A registration statement relating to these securities has been filed with the Securities and Exchange Commission. This preliminary pricing supplement and the accompanying product supplement, underlying supplement, prospectus supplement and prospectus are not an offer to sell these securities, nor are they soliciting an offer to buy these securities, in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED JANUARY 3, 2019  
**January-----, 2019**

**Medium-Term Senior Notes, Series N**

Citigroup Global Markets Holdings Inc. **Pricing Supplement No. 2019-USNCH1828**

**Filed Pursuant to Rule 424(b)(2)**

**Registration Statement Nos. 333-216372 and 333-216372-01**

Autocallable Securities Linked to the Worst Performing of the S&P 500<sup>®</sup> Index, the Russell 2000<sup>®</sup> Index and the Dow Jones Industrial Average<sup>™</sup> Due January 19, 2024

The securities offered by this pricing supplement are unsecured debt securities issued by Citigroup Global Markets Holdings Inc. and guaranteed by Citigroup Inc. Unlike conventional debt securities, the securities do not pay interest, do not guarantee the repayment of principal at maturity and are subject to potential automatic early redemption on a periodic basis on the terms described below. Your return on the securities will depend solely on the performance of the **worst performing** of the underlyings specified below.

The securities offer the potential for automatic early redemption at a premium following the first valuation date (other than the final valuation date) on which the closing value of the worst performing underlying on that valuation date is greater than or equal to its initial underlying value. If the securities are not automatically redeemed prior to maturity, the payment at maturity will depend on the final underlying value of the worst performing underlying on the final valuation date. In this circumstance, you will be repaid the stated principal amount of your securities at maturity so long as the final underlying value of the worst performing underlying on the final valuation date is greater than or equal to its trigger value specified below, and if the final underlying value of the worst performing underlying on the final valuation date is also greater than or equal to its initial underlying value, you will also receive a premium. **However, if the securities are not automatically redeemed prior to maturity and the final underlying value of the worst performing underlying on the final valuation date is less than its trigger value, you will incur a significant loss at maturity and will have full downside exposure to the depreciation of the worst performing underlying from its initial underlying value to its final underlying value.**

You will be subject to risks associated with each of the underlyings and will be negatively affected by adverse movements in any one of the underlyings. Although you will have downside exposure to the worst performing underlying, you will not receive dividends or participate in any appreciation of any of the underlyings.

Investors in the securities must be willing to accept (i) an investment that may have limited or no liquidity and (ii) the risk of not receiving any payments due under the securities if we and Citigroup Inc. default on our obligations. **All payments on the securities are subject to the credit risk of Citigroup Global Markets Holdings Inc. and Citigroup Inc.**

**KEY TERMS**

**Issuer:** Citigroup Global Markets Holdings Inc., a wholly owned subsidiary of Citigroup Inc.

**Guarantee:** All payments due on the securities are fully and unconditionally guaranteed by Citigroup Inc.

**Underlyings: Underlying** **Initial underlying value\*** **Trigger value\*\***

S&P 500<sup>®</sup> Index

Russell 2000<sup>®</sup> Index

Dow Jones Industrial Average<sup>™</sup>

\* For each underlying, its closing value on the pricing date

\*\* For each underlying, 60% of its initial underlying value

**Stated principal amount:** \$1,000 per security

**Pricing date:** January 16, 2019

**Issue date:** January 22, 2019

**Valuation dates:** January 16, 2020, April 16, 2020, July 16, 2020, October 16, 2020, January 19, 2021, April 16, 2021, July 16, 2021, October 18, 2021, January 18, 2022, April 18, 2022, July 18, 2022, October 17, 2022, January 17, 2023, April 17, 2023, July 17, 2023, October 16, 2023 and January 16, 2024 (the “final valuation date”), each subject to postponement if such date is not a scheduled trading day or certain market disruption events occur

**Maturity date:** Unless earlier redeemed, January 19, 2024

If, on any valuation date prior to the final valuation date, the closing value of the worst performing underlying on that valuation date is greater than or equal to its initial underlying value, the securities will be automatically redeemed on the fifth business day immediately following that valuation date for an amount in cash per security equal to \$1,000 *plus* the premium applicable to that valuation date. If the securities are automatically redeemed following any valuation date prior to the final valuation date, they will cease to be outstanding and you will not receive the premium applicable to any later valuation date.

**Automatic early redemption:** If the securities are not automatically redeemed prior to maturity, you will receive at maturity, for each security you then hold, an amount in cash equal to:

§ If the final underlying value of the worst performing underlying on the final valuation date is **greater than or equal to** its initial underlying value: \$1,000 + the premium applicable to the final valuation date

§ If the final underlying value of the worst performing underlying on the final valuation date is **less than** its initial underlying value but **greater than or equal to** its trigger value: \$1,000

§ If the final underlying value of the worst performing underlying on the final valuation date is **less than** its trigger value:

$\$1,000 + (\$1,000 \times \text{the underlying return of the worst performing underlying on the final valuation date})$

**If the securities are not automatically redeemed prior to maturity and the final underlying value of the worst performing underlying on the final valuation date is less than its trigger value, you will receive significantly less than the stated principal amount of your securities, and possibly nothing, at maturity.**

The securities will not be listed on any securities exchange

**Listing:**

**CUSIP / ISIN:**

17326Y6K7 / US17326Y6K76

**Underwriter:**

Citigroup Global Markets Inc. (“CGMI”), an affiliate of the issuer, acting as principal

**Underwriting fee and issue price:** Issue price<sup>(1)</sup> Underwriting fee<sup>(2)</sup> Proceeds to issuer<sup>(3)</sup>

**Per security:** \$1,000 \$42.25 \$957.75

**Total:** \$ \$ \$

*(Key Terms continued on next page)*

(1) Citigroup Global Markets Holdings Inc. currently expects that the estimated value of the securities on the pricing date will be at least \$901.50 per security, which will be less than the issue price. The estimated value of the securities is based on CGMI’s proprietary pricing models and our internal funding rate. It is not an indication of actual profit to CGMI or other of our affiliates, nor is it an indication of the price, if any, at which CGMI or any other person may be willing to buy the securities from you at any time after issuance. See “Valuation of the Securities” in this pricing supplement.

(2) CGMI will receive an underwriting fee of up to \$42.25 for each security sold in this offering. The total underwriting fee and proceeds to issuer in the table above give effect to the actual total underwriting fee. For more information on the distribution of the securities, see “Supplemental Plan of Distribution” in this pricing supplement. In addition to the underwriting fee, CGMI and its affiliates may profit from expected hedging activity related to this offering, even if the value of the securities declines. See “Use of Proceeds and Hedging” in the accompanying prospectus.

(3) The per security proceeds to issuer indicated above represent the minimum per security proceeds to issuer for any security, assuming the maximum per security underwriting fee. As noted above, the underwriting fee is variable.

**Investing in the securities involves risks not associated with an investment in conventional debt securities. See “Summary Risk Factors” beginning on page PS-7.**

**Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of the securities or determined that this pricing supplement and the accompanying product supplement, underlying supplement, prospectus supplement and prospectus are truthful or complete. Any representation to the contrary is a criminal offense. You should read this pricing supplement together with the accompanying product supplement, underlying supplement, prospectus supplement and prospectus, which can be accessed via the hyperlinks below:**

**Product Supplement No. EA-02-07 dated June 15, 2018**

**Underlying Supplement No. 7 dated July 16, 2018**

**Prospectus Supplement and Prospectus each dated April 7, 2017**

**The securities are not bank deposits and are not insured or guaranteed by the Federal Deposit Insurance Corporation or any other governmental agency, nor are they obligations of, or guaranteed by, a bank.**

Citigroup Global Markets Holdings Inc.

**KEY TERMS (continued)**

The premium applicable to each valuation date will be determined on the pricing date and will be at least **Premium:** the percentage indicated below. **The premium may be significantly less than the appreciation of any underlying from the pricing date to the applicable valuation date.**

- January 16, 2020: 10.20% of the stated principal amount
- April 16, 2020: 12.75% of the stated principal amount
- July 16, 2020: 15.30% of the stated principal amount
- October 16, 2020: 17.85% of the stated principal amount
- January 19, 2021: 20.40% of the stated principal amount
- April 16, 2021: 22.95% of the stated principal amount
- July 16, 2021: 25.50% of the stated principal amount
- October 18, 2021: 28.05% of the stated principal amount
- January 18, 2022: 30.60% of the stated principal amount
- April 18, 2022: 33.15% of the stated principal amount
- July 18, 2022: 35.70% of the stated principal amount
- October 17, 2022: 38.25% of the stated principal amount
- January 17, 2023: 40.80% of the stated principal amount
- April 17, 2023: 43.35% of the stated principal amount
- July 17, 2023: 45.90% of the stated principal amount
- October 16, 2023: 48.45% of the stated principal amount
- January 16, 2024: 51.00% of the stated principal amount

- Underlying return:** For each underlying on any valuation date, (i) its closing value on that valuation date *minus* its initial underlying value *divided by* (ii) its initial underlying value
- Worst performing underlying:** For any valuation date, the underlying with the lowest underlying return determined as of that valuation date
- Final underlying value:** For each underlying, its closing value on the final valuation date

Additional Information

The terms of the securities are set forth in the accompanying product supplement, prospectus supplement and prospectus, as supplemented by this pricing supplement. The accompanying product supplement, prospectus supplement and prospectus contain important disclosures that are not repeated in this pricing supplement. For example, the accompanying product supplement contains important information about how the closing value of each underlying will be determined and about adjustments that may be made to the terms of the securities upon the occurrence of market disruption events and other specified events with respect to each underlying. The accompanying underlying supplement contains information about each underlying that is not repeated in this pricing supplement. It is

important that you read the accompanying product supplement, underlying supplement, prospectus supplement and prospectus together with this pricing supplement in deciding whether to invest in the securities. Certain terms used but not defined in this pricing supplement are defined in the accompanying product supplement.

PS-2

Citigroup Global Markets Holdings Inc.

## Payout Tables and Diagram

The table below illustrates how the amount payable per security will be calculated if the closing value of the worst performing underlying on any valuation date is greater than or equal to its initial underlying value. The tables and diagram below assume that the premium will be set at the minimum level indicated under “Key Terms” above. The actual premium applicable to each valuation date will be determined on the pricing date.

<b>If the first valuation date on which the closing value of the worst performing underlying on that valuation date is greater than or equal to its initial underlying value is . . .</b>	<b>. . . then you will receive the following payment per \$1,000 security upon automatic early redemption or at maturity, as applicable:</b>
January 16, 2020	$\$1,000 + \text{applicable premium} = \$1,000 + \$102.00 = \$1,102.00$
April 16, 2020	$\$1,000 + \text{applicable premium} = \$1,000 + \$127.50 = \$1,127.50$
July 16, 2020	$\$1,000 + \text{applicable premium} = \$1,000 + \$153.00 = \$1,153.00$
October 16, 2020	$\$1,000 + \text{applicable premium} = \$1,000 + \$178.50 = \$1,178.50$
January 19, 2021	$\$1,000 + \text{applicable premium} = \$1,000 + \$204.00 = \$1,204.00$
April 16, 2021	$\$1,000 + \text{applicable premium} = \$1,000 + \$229.50 = \$1,229.50$
July 16, 2021	$\$1,000 + \text{applicable premium} = \$1,000 + \$255.00 = \$1,255.00$
October 18, 2021	$\$1,000 + \text{applicable premium} = \$1,000 + \$280.50 = \$1,280.50$
January 18, 2022	$\$1,000 + \text{applicable premium} = \$1,000 + \$306.00 = \$1,306.00$
April 18, 2022	$\$1,000 + \text{applicable premium} = \$1,000 + \$331.50 = \$1,331.50$
July 18, 2022	$\$1,000 + \text{applicable premium} = \$1,000 + \$357.00 = \$1,357.00$
October 17, 2022	$\$1,000 + \text{applicable premium} = \$1,000 + \$382.50 = \$1,382.50$
January 17, 2023	$\$1,000 + \text{applicable premium} = \$1,000 + \$408.00 = \$1,408.00$
April 17, 2023	$\$1,000 + \text{applicable premium} = \$1,000 + \$433.50 = \$1,433.50$
July 17, 2023	$\$1,000 + \text{applicable premium} = \$1,000 + \$459.00 = \$1,459.00$
October 16, 2023	

$\$1,000 + \text{applicable premium} = \$1,000 + \$484.50 =$   
 $\$1,484.50$

$\$1,000 + \text{applicable premium} = \$1,000 + \$510.00 =$   
 $\$1,510.00$

January 16, 2024

**If, on any valuation date, the closing value of any underlying is greater than or equal to its initial underlying value, but the closing value of any other underlying is less than its initial underlying value, you will not receive the premium indicated above following that valuation date. In order to receive the premium indicated above, the closing value of *each* underlying on the applicable valuation date must be greater than or equal to its initial underlying value.**

The table below indicates what your payment at maturity would be for various hypothetical underlying returns of the worst performing underlying on the final valuation date, assuming the securities are not automatically redeemed prior to maturity. Your actual payment at maturity (if the securities are not earlier automatically redeemed) will depend on the actual final underlying value of the worst performing underlying on the final valuation date.

PS-3



Citigroup Global Markets Holdings Inc.

**Hypothetical Payment at Maturity<sup>(1)</sup>**

**Hypothetical Underlying Return of Worst Performing Underlying on the Hypothetical Payment at Maturity**

**Final Valuation Date per Security**

100.00%	\$1,510.00
75.00%	\$1,510.00
50.00%	\$1,510.00
25.00%	\$1,510.00
10.00%	\$1,510.00
0.00%	\$1,510.00
-0.01%	\$1,000.00
-10.00%	\$1,000.00
-25.00%	\$1,000.00
-40.00%	\$1,000.00
-40.01%	\$599.90
-50.00%	\$500.00
-75.00%	\$250.00
-100.00%	\$0.00

<sup>(1)</sup> Assumes the securities are not automatically redeemed prior to maturity. Each security has a stated principal amount of \$1,000.00.

The diagram below illustrates the payment at maturity of the securities, assuming the securities have not previously been automatically redeemed, for a range of hypothetical underlying returns of the worst performing underlying on the final valuation date. Your payment at maturity (if the securities are not earlier automatically redeemed) will be determined based solely on the performance of the worst performing underlying on the final valuation date.

**Investors in the securities will not receive any dividends with respect to the underlyings. The diagram and examples below do not show any effect of lost dividend yield over the term of the securities.** See “Summary Risk Factors—You will not receive dividends or have any other rights with respect to the underlyings” below.

**Payment at Maturity**

n The Securities n The Worst Performing Underlying

## Citigroup Global Markets Holdings Inc.

## Hypothetical Examples of the Payment at Maturity

The examples below illustrate how to determine the payment at maturity on the securities, assuming the securities are not automatically redeemed prior to maturity and the final underlying value of the worst performing underlying on the final valuation date is less than its initial underlying value. The examples are solely for illustrative purposes, do not show all possible outcomes and are not a prediction of any payment that may be made on the securities.

The examples below are based on the following hypothetical values and do not reflect the actual initial underlying values or trigger values of the underlyings. For the actual initial underlying values and trigger values, see the cover page of this pricing supplement. We have used these hypothetical values, rather than the actual values, to simplify the calculations and aid understanding of how the securities work. However, you should understand that the actual payments on the securities will be calculated based on the actual initial underlying value and trigger value of each underlying, and not the hypothetical values indicated below.

<b>Underlying</b>	<b>Hypothetical initial underlying value</b>	<b>Hypothetical trigger value</b>
S&P 500® Index	100	60 (60% of its hypothetical initial underlying value)
Russell 2000® Index	100	60 (60% of its hypothetical initial underlying value)
Dow Jones Industrial Average™	100	60 (60% of its hypothetical initial underlying value)

The examples below are intended to illustrate how, if the securities are not automatically redeemed prior to maturity, your payment at maturity will depend on the final underlying value of the worst performing underlying on the final valuation date. Your actual payment at maturity per security will depend on the actual final underlying value of the worst performing underlying on the final valuation date.

**Example 1—Par Scenario.**

<b>Underlying</b>	<b>Hypothetical final underlying value</b>	<b>Hypothetical underlying return</b>
S&P 500® Index	90	-10%
Russell 2000® Index	110	10%
Dow Jones Industrial Average™	120	20%

In this example, the S&P 500<sup>®</sup> Index has the lowest underlying return and is, therefore, the worst performing underlying on the final valuation date. Because the final underlying value of the worst performing underlying on the final valuation date is less than its initial underlying value but greater than its trigger value, you would be repaid the stated principal amount of \$1,000 per security at maturity but would not receive any premium.

**Example 2—Downside Scenario.**

<b>Underlying</b>	<b>Hypothetical final underlying value</b>	<b>Hypothetical underlying return</b>
S&P 500 <sup>®</sup> Index	105	5%
Russell 2000 <sup>®</sup> Index	30	-70%
Dow Jones Industrial Average <sup>™</sup>	80	-20%

In this example, the Russell 2000<sup>®</sup> Index has the lowest underlying return and is, therefore, the worst performing underlying on the final valuation date. Because the final underlying value of the worst performing underlying on the final valuation date is less than its trigger value, you would receive a payment at maturity per security that is significantly less than the stated principal amount, calculated as follows:

Payment at maturity per security = \$1,000 + (\$1,000 × the underlying return of the worst performing underlying on the final valuation date)

$$= \$1,000 + (\$1,000 \times -70\%)$$

PS-5

Citigroup Global Markets Holdings Inc.

= \$1,000 + -\$700

= \$300

In this example, you would incur a significant loss at maturity and would have full downside exposure to the depreciation of the worst performing underlying on the final valuation date from its initial underlying value to its final underlying value.

PS-6

Citigroup Global Markets Holdings Inc.

## Summary Risk Factors

An investment in the securities is significantly riskier than an investment in conventional debt securities. The securities are subject to all of the risks associated with an investment in our conventional debt securities (guaranteed by Citigroup Inc.), including the risk that we and Citigroup Inc. may default on our obligations under the securities, and are also subject to risks associated with each underlying. Accordingly, the securities are suitable only for investors who are capable of understanding the complexities and risks of the securities. You should consult your own financial, tax and legal advisors as to the risks of an investment in the securities and the suitability of the securities in light of your particular circumstances.

The following is a summary of certain key risk factors for investors in the securities. You should read this summary together with the more detailed description of risks relating to an investment in the securities contained in the section “Risk Factors Relating to the Securities” beginning on page EA-7 in the accompanying product supplement. You should also carefully read the risk factors included in the accompanying prospectus supplement and in the documents incorporated by reference in the accompanying prospectus, including Citigroup Inc.’s most recent Annual Report on Form 10-K and any subsequent Quarterly Reports on Form 10-Q, which describe risks relating to the business of Citigroup Inc. more generally. Citigroup Inc. will release quarterly earnings on January 14, 2019, which is during the marketing period and prior to the pricing date of these securities.

**You may lose a significant portion or all of your investment.** Unlike conventional debt securities, the securities do not provide for the repayment of the stated principal amount at maturity in all circumstances. If the securities are not automatically redeemed prior to maturity, your payment at maturity will depend on the final underlying value of § the worst performing underlying on the final valuation date. If the final underlying value of the worst performing underlying on the final valuation date is less than its trigger value, you will lose 1% of the stated principal amount of the securities for every 1% by which the worst performing underlying has declined from its initial underlying value. There is no minimum payment at maturity on the securities, and you may lose up to all of your investment.

**Your potential return on the securities is limited.** Your potential return on the securities is limited to the applicable premium payable upon automatic early redemption or at maturity. If the closing value of the worst performing underlying on one of the valuation dates is greater than or equal to its initial underlying value, you will § be repaid the stated principal amount of your securities and will receive the fixed premium applicable to that valuation date, regardless of how significantly the closing value of the worst performing underlying on that valuation date may exceed its initial underlying value. Accordingly, any premium may result in a return on the securities that is significantly less than the return you could have achieved on a direct investment in any or all of the underlyings.

**The securities do not pay interest.** You should not invest in the securities if you seek current income during the § term of the securities.

**The securities are subject to heightened risk because they have multiple underlyings.** The securities are more § risky than similar investments that may be available with only one underlying. With multiple underlyings, there is a greater chance that any one underlying will perform poorly, adversely affecting your return on the securities.

**The securities are subject to the risks of each of the underlyings and will be negatively affected if any one underlying performs poorly.** You are subject to risks associated with each of the underlyings. If any one § underlying performs poorly, you will be negatively affected. The securities are not linked to a basket composed of the underlyings, where the blended performance of the underlyings would be better than the performance of the worst performing underlying alone. Instead, you are subject to the full risks of whichever of the underlyings is the worst performing underlying.

**You will not benefit in any way from the performance of any better performing underlying.** The return on the § securities depends solely on the performance of the worst performing underlying, and you will not benefit in any way from the performance of any better performing underlying.

**You will be subject to risks relating to the relationship between the underlyings.** It is preferable from your perspective for the underlyings to be correlated with each other, in the sense that they tend to increase or decrease at similar times and by similar magnitudes. By investing in the securities, you assume the risk that the underlyings will § not exhibit this relationship. The less correlated the underlyings, the more likely it is that any one of the underlyings will perform poorly over the term of the securities. All that is necessary for the securities to perform poorly is for one of the underlyings to perform poorly. It is impossible to predict what the relationship between the underlyings will be over the term of the securities. The underlyings differ in significant ways and, therefore, may not be correlated with each other.

**The securities may be automatically redeemed prior to maturity, limiting the term of the securities.** If the § closing value of the worst performing underlying on any valuation date (other than the final valuation date) is greater than or equal to its initial underlying value, the securities will be automatically redeemed. If the securities are automatically redeemed following any valuation date (other than the final valuation date), they will cease to be outstanding and you will not receive the premium applicable to any later valuation date. Moreover, you may not be able to reinvest your funds in another investment that provides a similar yield with a similar level of risk.

PS-7

Citigroup Global Markets Holdings Inc.

**The securities offer downside exposure to the worst performing underlying, but no upside exposure to any underlying.** You will not participate in any appreciation in the value of any underlying over the term of the § securities. Consequently, your return on the securities will be limited to the applicable premium payable upon an automatic early redemption or at maturity and may be significantly less than the return on any underlying over the term of the securities.

**You will not receive dividends or have any other rights with respect to the underlyings.** You will not receive any dividends with respect to the underlyings. This lost dividend yield may be significant over the term of the § securities. The payment scenarios described in this pricing supplement do not show any effect of such lost dividend yield over the term of the securities. In addition, you will not have voting rights or any other rights with respect to the underlyings or the stocks included in the underlyings.

**The performance of the securities will depend on the closing values of the underlyings solely on the valuation dates, which makes the securities particularly sensitive to volatility in the closing values of the underlyings on or near the valuation dates.** Whether the securities will be automatically redeemed prior to maturity will depend on the closing values of the underlyings solely on the valuation dates (other than the final valuation date), regardless of the closing values of the underlyings on other days during the term of the securities. If the securities are not § automatically redeemed prior to maturity, what you receive at maturity will depend solely on the final underlying value of the worst performing underlying on the final valuation date, and not on any other day during the term of the securities. Because the performance of the securities depends on the closing values of the underlyings on a limited number of dates, the securities will be particularly sensitive to volatility in the closing values of the underlyings on or near the valuation dates. You should understand that the closing value of each underlying has historically been highly volatile.

**The securities are subject to the credit risk of Citigroup Global Markets Holdings Inc. and Citigroup Inc.** If § we default on our obligations under the securities and Citigroup Inc. defaults on its guarantee obligations, you may not receive anything owed to you under the securities.

**The securities will not be listed on any securities exchange and you may not be able to sell them prior to maturity.** The securities will not be listed on any securities exchange. Therefore, there may be little or no secondary market for the securities. CGMI currently intends to make a secondary market in relation to the securities and to provide an indicative bid price for the securities on a daily basis. Any indicative bid price for the securities provided § by CGMI will be determined in CGMI's sole discretion, taking into account prevailing market conditions and other relevant factors, and will not be a representation by CGMI that the securities can be sold at that price, or at all. CGMI may suspend or terminate making a market and providing indicative bid prices without notice, at any time and for any reason. If CGMI suspends or terminates making a market, there may be no secondary market at all for the securities because it is likely that CGMI will be the only broker-dealer that is willing to buy your securities prior to maturity. Accordingly, an investor must be prepared to hold the securities until maturity.

**§ The estimated value of the securities on the pricing date, based on CGMI's proprietary pricing models and our internal funding rate, is less than the issue price.** The difference is attributable to certain costs associated with selling, structuring and hedging the securities that are included in the issue price. These costs include (i) any selling

concessions or other fees paid in connection with the offering of the securities, (ii) hedging and other costs incurred by us and our affiliates in connection with the offering of the securities and (iii) the expected profit (which may be more or less than actual profit) to CGMI or other of our affiliates in connection with hedging our obligations under the securities. These costs adversely affect the economic terms of the securities because, if they were lower, the economic terms of the securities would be more favorable to you. The economic terms of the securities are also likely to be adversely affected by the use of our internal funding rate, rather than our secondary market rate, to price the securities. See “The estimated value of the securities would be lower if it were calculated based on our secondary market rate” below.

**The estimated value of the securities was determined for us by our affiliate using proprietary pricing models.**

CGMI derived the estimated value disclosed on the cover page of this pricing supplement from its proprietary pricing models. In doing so, it may have made discretionary judgments about the inputs to its models, such as the volatility of and correlation between the underlyings, dividend yields on the underlyings and interest rates. CGMI’s views on these inputs may differ from your or others’ views, and as an underwriter in this offering, CGMI’s interests § may conflict with yours. Both the models and the inputs to the models may prove to be wrong and therefore not an accurate reflection of the value of the securities. Moreover, the estimated value of the securities set forth on the cover page of this pricing supplement may differ from the value that we or our affiliates may determine for the securities for other purposes, including for accounting purposes. You should not invest in the securities because of the estimated value of the securities. Instead, you should be willing to hold the securities to maturity irrespective of the initial estimated value.

**The estimated value of the securities would be lower if it were calculated based on our secondary market rate.**

The estimated value of the securities included in this pricing supplement is calculated based on our internal funding rate, which is the rate at which we are willing to borrow funds through the issuance of the securities. Our internal funding rate is generally lower than our secondary market rate, which is the rate that CGMI will use in determining § the value of the securities for purposes of any purchases of the securities from you in the secondary market. If the estimated value included in this pricing supplement were based on our secondary market rate, rather than our internal funding rate, it would likely be lower. We determine our internal funding rate based on factors such as the costs associated with the securities, which are generally higher than the costs associated with conventional debt securities, and our liquidity needs and preferences. Our internal funding rate is not an interest rate that is payable on the securities.



Citigroup Global Markets Holdings Inc.

Because there is not an active market for traded instruments referencing our outstanding debt obligations, CGMI determines our secondary market rate based on the market price of traded instruments referencing the debt obligations of Citigroup Inc., our parent company and the guarantor of all payments due on the securities, but subject to adjustments that CGMI makes in its sole discretion. As a result, our secondary market rate is not a market-determined measure of our creditworthiness, but rather reflects the market's perception of our parent company's creditworthiness as adjusted for discretionary factors such as CGMI's preferences with respect to purchasing the securities prior to maturity.

**The estimated value of the securities is not an indication of the price, if any, at which CGMI or any other person may be willing to buy the securities from you in the secondary market.** Any such secondary market price will fluctuate over the term of the securities based on the market and other factors described in the next risk factor. Moreover, unlike the estimated value included in this pricing supplement, any value of the securities determined for purposes of a secondary market transaction will be based on our secondary market rate, which will likely result in a lower value for the securities than if our internal funding rate were used. In addition, any secondary market price for the securities will be reduced by a bid-ask spread, which may vary depending on the aggregate stated principal amount of the securities to be purchased in the secondary market transaction, and the expected cost of unwinding related hedging transactions. As a result, it is likely that any secondary market price for the securities will be less than the issue price.

§ **The value of the securities prior to maturity will fluctuate based on many unpredictable factors.** The value of your securities prior to maturity will fluctuate based on the closing values of the underlyings, the volatility of the closing values of the underlyings, the correlation between the underlyings, dividend yields on the underlyings, interest rates generally, the time remaining to maturity and our and Citigroup Inc.'s creditworthiness, as reflected in our secondary market rate, among other factors described under "Risk Factors Relating to the Securities—Risk Factors Relating to All Securities—The value of your securities prior to maturity will fluctuate based on many unpredictable factors" in the accompanying product supplement. Changes in the closing values of the underlyings may not result in a comparable change in the value of your securities. You should understand that the value of your securities at any time prior to maturity may be significantly less than the issue price.

§ **Immediately following issuance, any secondary market bid price provided by CGMI, and the value that will be indicated on any brokerage account statements prepared by CGMI or its affiliates, will reflect a temporary upward adjustment.** The amount of this temporary upward adjustment will steadily decline to zero over the temporary adjustment period. See "Valuation of the Securities" in this pricing supplement.

§ **The Russell 2000® Index is subject to risks associated with small capitalization stocks.** The stocks that constitute the Russell 2000® Index are issued by companies with relatively small market capitalization. The stock prices of smaller companies may be more volatile than stock prices of large capitalization companies. These companies tend to be less well-established than large market capitalization companies. Small capitalization companies may be less able to withstand adverse economic, market, trade and competitive conditions relative to larger companies. Small capitalization companies are less likely to pay dividends on their stocks, and the presence of a

dividend payment could be a factor that limits downward stock price pressure under adverse market conditions.

§ **Our offering of the securities is not a recommendation of any underlying.** The fact that we are offering the securities does not mean that we believe that investing in an instrument linked to the underlyings is likely to achieve favorable returns. In fact, as we are part of a global financial institution, our affiliates may have positions (including short positions) in the underlyings or in instruments related to the underlyings, and may publish research or express opinions, that in each case are inconsistent with an investment linked to the underlyings. These and other activities of our affiliates may affect the closing values of the underlyings in a way that negatively affects the value of and your return on the securities.

§ **The closing value of an underlying may be adversely affected by our or our affiliates' hedging and other trading activities.** We expect to hedge our obligations under the securities through CGMI or other of our affiliates, who may take positions in the underlyings or in financial instruments related to the underlyings and may adjust such positions during the term of the securities. Our affiliates also take positions in the underlyings or in financial instruments related to the underlyings on a regular basis (taking long or short positions or both), for their accounts, for other accounts under their management or to facilitate transactions on behalf of customers. These activities could affect the closing value of the underlyings in a way that negatively affects the value of and your return on the securities. They could also result in substantial returns for us or our affiliates while the value of the securities declines.

§ **We and our affiliates may have economic interests that are adverse to yours as a result of our affiliates' business activities.** Our affiliates engage in business activities with a wide range of companies. These activities include extending loans, making and facilitating investments, underwriting securities offerings and providing advisory services. These activities could involve or affect the underlyings in a way that negatively affects the value of and your return on the securities. They could also result in substantial returns for us or our affiliates while the value of the securities declines. In addition, in the course of this business, we or our affiliates may acquire non-public information, which will not be disclosed to you.

§ **The calculation agent, which is an affiliate of ours, will make important determinations with respect to the securities.** If certain events occur during the term of the securities, such as market disruption events and other events with respect to an underlying, CGMI, as calculation agent, will be required to make discretionary judgments that could significantly affect your return on the securities. In making these judgments, the calculation agent's interests as an affiliate of ours could be adverse to your interests as a holder of the securities. See "Risks Relating to the Securities—Risks Relating to All Securities—The calculation

Citigroup Global Markets Holdings Inc.

agent, which is an affiliate of ours, will make important determinations with respect to the securities” in the accompanying product supplement.

§ **Changes that affect the underlyings may affect the value of your securities.** The sponsors of the underlyings may at any time make methodological changes or other changes in the manner in which they operate that could affect the values of the underlyings. We are not affiliated with any such underlying sponsor and, accordingly, we have no control over any changes any such sponsor may make. Such changes could adversely affect the performance of the underlyings and the value of and your return on the securities.

§ **The U.S. federal tax consequences of an investment in the securities are unclear.** There is no direct legal authority regarding the proper U.S. federal tax treatment of the securities, and we do not plan to request a ruling from the Internal Revenue Service (the “IRS”). Consequently, significant aspects of the tax treatment of the securities are uncertain, and the IRS or a court might not agree with the treatment of the securities as prepaid forward contracts. If the IRS were successful in asserting an alternative treatment of the securities, the tax consequences of the ownership and disposition of the securities might be materially and adversely affected. Moreover, future legislation, Treasury regulations or IRS guidance could adversely affect the U.S. federal tax treatment of the securities, possibly retroactively.

If you are a non-U.S. investor, you should review the discussion of withholding tax issues in “United States Federal Tax Considerations—Non-U.S. Holders” below.

You should read carefully the discussion under “United States Federal Tax Considerations” and “Risk Factors Relating to the Securities” in the accompanying product supplement and “United States Federal Tax Considerations” in this pricing supplement. You should also consult your tax adviser regarding the U.S. federal tax consequences of an investment in the securities, as well as tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdiction.

PS-10

Citigroup Global Markets Holdings Inc.

### Information About the S&P 500<sup>®</sup> Index

The S&P 500<sup>®</sup> Index consists of the common stocks of 500 issuers selected to provide a performance benchmark for the large capitalization segment of the U.S. equity markets. It is calculated and maintained by S&P Dow Jones Indices LLC.

Please refer to the section “Equity Index Descriptions—The S&P U.S. Indices—The S&P 500<sup>®</sup>” in the accompanying underlying supplement for additional information.

We have derived all information regarding the S&P 500<sup>®</sup> Index from publicly available information and have not independently verified any information regarding the S&P 500<sup>®</sup> Index. This pricing supplement relates only to the securities and not to the S&P 500<sup>®</sup> Index. We make no representation as to the performance of the S&P 500<sup>®</sup> Index over the term of the securities.

The securities represent obligations of Citigroup Global Markets Holdings Inc. (guaranteed by Citigroup Inc.) only. The sponsor of the S&P 500<sup>®</sup> Index is not involved in any way in this offering and has no obligation relating to the securities or to holders of the securities.

### Historical Information

The closing value of the S&P 500<sup>®</sup> Index on December 31, 2018 was 2,506.85.

The graph below shows the closing value of the S&P 500<sup>®</sup> Index for each day such value was available from January 2, 2008 to December 31, 2018. We obtained the closing values from Bloomberg L.P., without independent verification. You should not take historical closing values as an indication of future performance.

Citigroup Global Markets Holdings Inc.

#### Information About the Russell 2000® Index

The Russell 2000® Index is designed to track the performance of the small capitalization segment of the U.S. equity market. All stocks included in the Russell 2000® Index are traded on a major U.S. exchange. It is calculated and maintained by FTSE Russell.

Please refer to the section “Equity Index Descriptions—The Russell Indices—The Russell~~2000~~® Index” in the accompanying underlying supplement for additional information.

We have derived all information regarding the Russell 2000® Index from publicly available information and have not independently verified any information regarding the Russell 2000® Index. This pricing supplement relates only to the securities and not to the Russell 2000® Index. We make no representation as to the performance of the Russell 2000® Index over the term of the securities.

The securities represent obligations of Citigroup Global Markets Holdings Inc. (guaranteed by Citigroup Inc.) only. The sponsor of the Russell 2000® Index is not involved in any way in this offering and has no obligation relating to the securities or to holders of the securities.

#### Historical Information

The closing value of the Russell 2000® Index on December 31, 2018 was 1,348.559.

The graph below shows the closing value of the Russell 2000® Index for each day such value was available from January 2, 2008 to December 31, 2018. We obtained the closing values from Bloomberg L.P., without independent verification. You should not take historical closing values as an indication of future performance.

Citigroup Global Markets Holdings Inc.

#### Information About the Dow Jones Industrial Average™

The Dow Jones Industrial Average™ is a price-weighted index rather than a market capitalization-weighted index. The Dow Jones Industrial Average™ consists of 30 common stocks chosen as representative of the broad market of U.S. industry. It is calculated and maintained by S&P Dow Jones Indices LLC.

Please refer to the section “Equity Index Descriptions—The Dow Jones Industrial Average™” in the accompanying underlying supplement for additional information.

We have derived all information regarding the Dow Jones Industrial Average™ from publicly available information and have not independently verified any information regarding the Dow Jones Industrial Average™. This pricing supplement relates only to the securities and not to the Dow Jones Industrial Average™. We make no representation as to the performance of the Dow Jones Industrial Average™ over the term of the securities.

The securities represent obligations of Citigroup Global Markets Holdings Inc. (guaranteed by Citigroup Inc.) only. The sponsor of the Dow Jones Industrial Average™ is not involved in any way in this offering and has no obligation relating to the securities or to holders of the securities.

#### Historical Information

The closing value of the Dow Jones Industrial Average™ on December 31, 2018 was \$23,327.46.

The graph below shows the closing value of the Dow Jones Industrial Average™ for each day such value was available from January 2, 2008 to December 31, 2018. We obtained the closing values from Bloomberg L.P., without independent verification. You should not take historical closing values as an indication of future performance.

Citigroup Global Markets Holdings Inc.

## United States Federal Tax Considerations

You should read carefully the discussion under “United States Federal Tax Considerations” and “Risk Factors Relating to the Securities” in the accompanying product supplement and “Summary Risk Factors” in this pricing supplement.

In the opinion of our counsel, Davis Polk & Wardwell LLP, a security should be treated as a prepaid forward contract for U.S. federal income tax purposes. By purchasing a security, you agree (in the absence of an administrative determination or judicial ruling to the contrary) to this treatment. There is uncertainty regarding this treatment, and the IRS or a court might not agree with it. Moreover, our counsel’s opinion is based on market conditions as of the date of this preliminary pricing supplement and is subject to confirmation on the pricing date.

Assuming this treatment of the securities is respected and subject to the discussion in “United States Federal Tax Considerations” in the accompanying product supplement, the following U.S. federal income tax consequences should result under current law:

You should not recognize taxable income over the term of the securities prior to maturity, other than pursuant to a sale or exchange.

Upon a sale or exchange of a security (including retirement at maturity), you should recognize capital gain or loss equal to the difference between the amount realized and your tax basis in the security. Such gain or loss should be long-term capital gain or loss if you held the security for more than one year.

We do not plan to request a ruling from the IRS regarding the treatment of the securities. An alternative characterization of the securities could materially and adversely affect the tax consequences of ownership and disposition of the securities, including the timing and character of income recognized. In addition, the U.S. Treasury Department and the IRS have requested comments on various issues regarding the U.S. federal income tax treatment of “prepaid forward contracts” and similar financial instruments and have indicated that such transactions may be the subject of future regulations or other guidance. Furthermore, members of Congress have proposed legislative changes to the tax treatment of derivative contracts. Any legislation, Treasury regulations or other guidance promulgated after consideration of these issues could materially and adversely affect the tax consequences of an investment in the securities, possibly with retroactive effect. You should consult your tax adviser regarding possible alternative tax treatments of the securities and potential changes in applicable law.

**Non-U.S. Holders.** Subject to the discussions below and in “United States Federal Tax Considerations” in the accompanying product supplement, if you are a Non-U.S. Holder (as defined in the accompanying product

supplement) of the securities, you generally should not be subject to U.S. federal withholding or income tax in respect of any amount paid to you with respect to the securities, provided that (i) income in respect of the securities is not effectively connected with your conduct of a trade or business in the United States, and (ii) you comply with the applicable certification requirements.

As discussed under “United States Federal Tax Considerations—Tax Consequences to Non-U.S. Holders” in the accompanying product supplement, Section 871(m) of the Code and Treasury regulations promulgated thereunder (“Section 871(m)”) generally impose a 30% withholding tax on dividend equivalents paid or deemed paid to Non-U.S. Holders with respect to certain financial instruments linked to U.S. equities (“U.S. Underlying Equities”) or indices that include U.S. Underlying Equities. Section 871(m) generally applies to instruments that substantially replicate the economic performance of one or more U.S. Underlying Equities, as determined based on tests set forth in the applicable Treasury regulations. However, the regulations, as modified by an IRS notice, exempt financial instruments issued prior to January 1, 2021 that do not have a “delta” of one. Based on the terms of the securities and representations provided by us as of the date of this preliminary pricing supplement, our counsel is of the opinion that the securities should not be treated as transactions that have a “delta” of one within the meaning of the regulations with respect to any U.S. Underlying Equity and, therefore, should not be subject to withholding tax under Section 871(m). However, the final determination regarding the treatment of the securities under Section 871(m) will be made as of the pricing date for the securities, and it is possible that the securities will be subject to withholding tax under Section 871(m) based on the circumstances as of that date.

A determination that the securities are not subject to Section 871(m) is not binding on the IRS, and the IRS may disagree with this treatment. Moreover, Section 871(m) is complex and its application may depend on your particular circumstances, including your other transactions. You should consult your tax adviser regarding the potential application of Section 871(m) to the securities.

If withholding tax applies to the securities, we will not be required to pay any additional amounts with respect to amounts withheld.

**FATCA.** You should review the section entitled “United States Federal Tax Considerations—FATCA” in the accompanying product supplement regarding withholding rules under the “FATCA” regime. The discussion in that section is hereby modified to reflect regulations proposed by the U.S. Treasury Department indicating an intent to eliminate the requirement under FATCA of withholding on gross proceeds of the disposition of affected financial instruments. The U.S. Treasury Department has indicated that taxpayers may rely on these proposed regulations pending their finalization.

**You should read the section entitled “United States Federal Tax Considerations” in the accompanying product supplement. The preceding discussion, when read in combination with that section, constitutes the full opinion of Davis Polk & Wardwell LLP regarding the material U.S. federal tax consequences of owning and disposing of the securities.**



**You should also consult your tax adviser regarding all aspects of the U.S. federal income and estate tax consequences of an investment in the securities and any tax consequences arising under the laws of any state, local or non-U.S. taxing jurisdiction.**

PS-14

Citigroup Global Markets Holdings Inc.

### Supplemental Plan of Distribution

CGMI, an affiliate of Citigroup Global Markets Holdings Inc. and the underwriter of the sale of the securities, is acting as principal and will receive an underwriting fee of up to \$42.25 for each security sold in this offering. The actual underwriting fee will be equal to the selling concession provided to selected dealers, as described in this paragraph. From this underwriting fee, CGMI will pay selected dealers not affiliated with CGMI a variable selling concession of up to \$42.25 for each security they sell. For the avoidance of doubt, the fees and selling concessions described in this pricing supplement will not be rebated if the securities are automatically redeemed prior to maturity.

See “Plan of Distribution; Conflicts of Interest” in the accompanying product supplement and “Plan of Distribution” in each of the accompanying prospectus supplement and prospectus for additional information.

### Valuation of the Securities

CGMI calculated the estimated value of the securities set forth on the cover page of this pricing supplement based on proprietary pricing models. CGMI’s proprietary pricing models generated an estimated value for the securities by estimating the value of a hypothetical package of financial instruments that would replicate the payout on the securities, which consists of a fixed-income bond (the “bond component”) and one or more derivative instruments underlying the economic terms of the securities (the “derivative component”). CGMI calculated the estimated value of the bond component using a discount rate based on our internal funding rate. CGMI calculated the estimated value of the derivative component based on a proprietary derivative-pricing model, which generated a theoretical price for the instruments that constitute the derivative component based on various inputs, including the factors described under “Summary Risk Factors—The value of the securities prior to maturity will fluctuate based on many unpredictable factors” in this pricing supplement, but not including our or Citigroup Inc.’s creditworthiness. These inputs may be market-observable or may be based on assumptions made by CGMI in its discretionary judgment.

The estimated value of the securities is a function of the terms of the securities and the inputs to CGMI’s proprietary pricing models. As of the date of this preliminary pricing supplement, it is uncertain what the estimated value of the securities will be on the pricing date because certain terms of the securities have not yet been fixed and because it is uncertain what the values of the inputs to CGMI’s proprietary pricing models will be on the pricing date.

For a period of approximately four months following issuance of the securities, the price, if any, at which CGMI would be willing to buy the securities from investors, and the value that will be indicated for the securities on any brokerage account statements prepared by CGMI or its affiliates (which value CGMI may also publish through one or more financial information vendors), will reflect a temporary upward adjustment from the price or value that would

otherwise be determined. This temporary upward adjustment represents a portion of the hedging profit expected to be realized by CGMI or its affiliates over the term of the securities. The amount of this temporary upward adjustment will decline to zero on a straight-line basis over the four-month temporary adjustment period. However, CGMI is not obligated to buy the securities from investors at any time. See “Summary Risk Factors—The securities will not be listed on any securities exchange and you may not be able to sell them prior to maturity.”

#### Certain Selling Restrictions

#### Hong Kong Special Administrative Region

The contents of this pricing supplement and the accompanying product supplement, underlying supplement, prospectus supplement and prospectus have not been reviewed by any regulatory authority in the Hong Kong Special Administrative Region of the People’s Republic of China (“Hong Kong”). Investors are advised to exercise caution in relation to the offer. If investors are in any doubt about any of the contents of this pricing supplement and the accompanying product supplement, underlying supplement, prospectus supplement and prospectus, they should obtain independent professional advice.

The securities have not been offered or sold and will not be offered or sold in Hong Kong by means of any document, other than

- (i) to persons whose ordinary business is to buy or sell shares or debentures (whether as principal or agent); or
- (ii) to “professional investors” as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong (the “Securities and Futures Ordinance”) and any rules made under that Ordinance; or

in other circumstances which do not result in the document being a “prospectus” as defined in the Companies (iii) Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance; and

There is no advertisement, invitation or document relating to the securities which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to securities which are or are intended to be disposed of only to persons outside Hong Kong or only to “professional investors” as defined in the Securities and Futures Ordinance and any rules made under that Ordinance.

Citigroup Global Markets Holdings Inc.

Non-insured Product: These securities are not insured by any governmental agency. These securities are not bank deposits and are not covered by the Hong Kong Deposit Protection Scheme.

Singapore

This pricing supplement and the accompanying product supplement, underlying supplement, prospectus supplement and prospectus have not been registered as a prospectus with the Monetary Authority of Singapore, and the securities will be offered pursuant to exemptions under the Securities and Futures Act, Chapter 289 of Singapore (the “Securities and Futures Act”). Accordingly, the securities may not be offered or sold or made the subject of an invitation for subscription or purchase nor may this pricing supplement or any other document or material in connection with the offer or sale or invitation for subscription or purchase of any securities be circulated or distributed, whether directly or indirectly, to any person in Singapore other than (a) to an institutional investor pursuant to Section 274 of the Securities and Futures Act, (b) to a relevant person under Section 275(1) of the Securities and Futures Act or to any person pursuant to Section 275(1A) of the Securities and Futures Act and in accordance with the conditions specified in Section 275 of the Securities and Futures Act, or (c) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the Securities and Futures Act. Where the securities are subscribed or purchased under Section 275 of the Securities and Futures Act by a relevant person which is:

a corporation (which is not an accredited investor (as defined in Section 4A of the Securities and Futures Act)) the (a) sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or

a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary is an individual who is an accredited investor, securities (as defined in Section 239(1) of the Securities (b) and Futures Act) of that corporation or the beneficiaries’ rights and interests (howsoever described) in that trust shall not be transferable for 6 months after that corporation or that trust has acquired the relevant securities pursuant to an offer under Section 275 of the Securities and Futures Act except:

to an institutional investor or to a relevant person defined in Section 275(2) of the Securities and Futures Act or to (i) any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the Securities and Futures Act; or

(ii) where no consideration is or will be given for the transfer; or

(iii) where the transfer is by operation of law; or

(iv) pursuant to Section 276(7) of the Securities and Futures Act; or

(v) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Any securities referred to herein may not be registered with any regulator, regulatory body or similar organization or institution in any jurisdiction.

The securities are Specified Investment Products (as defined in the Notice on Recommendations on Investment Products and Notice on the Sale of Investment Product issued by the Monetary Authority of Singapore on 28 July 2011) that is neither listed nor quoted on a securities market or a futures market.

Non-insured Product: These securities are not insured by any governmental agency. These securities are not bank deposits. These securities are not insured products subject to the provisions of the Deposit Insurance and Policy Owners' Protection Schemes Act 2011 of Singapore and are not eligible for deposit insurance coverage under the Deposit Insurance Scheme.

#### Contact

Clients may contact their local brokerage representative. Third-party distributors may contact Citi Structured Investment Sales at (212) 723-7005.

© 2019 Citigroup Global Markets Inc. All rights reserved. Citi and Citi and Arc Design are trademarks and service marks of Citigroup Inc. or its affiliates and are used and registered throughout the world.

PS-16

